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TITLE:

Stochastic computers follow-up integrator - uses summing

counter and commutation switch with first and second data

inputs connected to linear coder outputs

INVENTOR: LEUSENKO, A E; MOROZEVICH, A N; YARMOLIK, V N

PATENT-ASSIGNEE: MINSK RADIO ENG[MIRAR]

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BASIC-ABSTRACT:

Summing counter and a commutation switch are introduced to a computer integrator to increase operational speed. Commutation switch's inputs are connected to linear coding unit, and outputs to adding and subtracting inputs of reversing counter. Summing counter is coupled to integrator clock input and commutation switch controls.

Circuit contains linear coding unit (1), commutation switch (2), reversing counter (3), comparator (4), random numbers generator (5) and summing counter (6).

In the first stage of "coarse" integration pulse sequences (1) are applied to adding and subtracting inputs reversing counter (3) higher order digits. Simultaneously the pulses are applied to summing counter (6). When content

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reaches preset value commutator (2) is actuated switching over the sequence to a lower order digit of reversing counter for "precise" integration.

The arrangement reduces integration time by half, without reducing integration accuracy.

TITLE-TERMS: STOCHASTIC COMPUTER FOLLOW UP INTEGRATE SUM COUNTER COMMUTATE
SWITCH FIRST SECOND DATA INPUT CONNECT LINEAR CODE OUTPUT

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